

**California Public Utilities Commission
Rulemaking 13-11-007
Plug-In Electric Vehicle (PEV) Infrastructure Metrics and Data Collection**

June 16, 2015

CPUC Auditorium, 505 Van Ness Avenue, San Francisco

9:30 am – 4:00 pm

(Also noticed to the Service Lists of A.14-04-014, A.14-10-014, and A.15-02-009)

Purpose:

We will consider how Energy Division's proposed infrastructure Site Segmentation and Selection Criteria (see p. 14-46 of the CPUC pdf attached below) relate to the Data and Metrics that are needed to evaluate PEV programs.



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Document

Please prepare to discuss:

- 1) The availability of data from existing infrastructure installations;
- 2) How such data maps to the benefits and costs associated with PEV infrastructure; and
- 3) How data may inform Energy Division's, utilities', and parties' current or future analyses.

For Remote Participants:

We encourage parties to provide feedback and questions.

WebEx	Teleconference
Visit: https://van.webex.com/van/j.php?MTID=m8f05e36c564e41d04072960cf1d4d0fd Meeting #: 275 616 820	Call-In #: 1 866 811 6884
Password: !Energy1	Passcode: 8742156
During the workshop, remote participants will have the opportunity to provide questions and comments through the chat feature on WebEx.	Please be sure to mute your phone lines unless you have been identified to speak.

For more information:

Presentations will be posted shortly after the workshop at the CPUC [Alternative Fuel Vehicles Website](#) or contact Adam.Langton@cpuc.ca.gov or Noel.Crisostomo@cpuc.ca.gov.

Agenda:

Start (Duration)	Topic and Goal	Presenter / Participants
9:30 am (15 m)	Welcome: Purpose of workshop, relation to Order Instituting Rulemaking and Applications.	Energy Division staff
9:45 am (45 m)	Discuss the use and application of metrics and data collection. <ol style="list-style-type: none">1. <i>How should the cost of data collection be balanced against the benefits of analysis?</i>2. <i>What limitations do quantitative metrics have in evaluating the performance of PEV</i>	Energy Division-led stakeholder discussion

	<i>infrastructure deployment?</i> 3. <i>How should the Commission interpret and apply quantitative metrics for PEV infrastructure deployment?</i>	
10:30 am (30 m)	Quantifying Benefits and Costs of PEV Infrastructure (see table below)	Energy Division-led stakeholder discussion
11:00 am (10 m)	Break	
11:10 am (30 m)	Benefits: How do we measure electric miles? e.g.: <ul style="list-style-type: none"> • Sensitivity to PEV type (PHEV v. BEV) • Economic alternatives (home v. work) 	Cross-Party activity & reports
11:40 pm (30 m)	Benefits: How do we measure PEV adoption? e.g.: <ul style="list-style-type: none"> • Surveyed v. Modeled • Directly associated w/ EVSE v. induced 	Cross-Party activity & reports
12:10pm (1 h)	Lunch	
1:10 pm (1 h)	Measuring Costs <ul style="list-style-type: none"> • Define cost categories • Data collection strategies • Utility vs. non-utility cost 	Cross-Party activity & reports
2:10 pm (30 m)	Existing PEV Infrastructure Data <ol style="list-style-type: none"> 1. <i>What data does industry currently collect from their deployments?</i> 2. <i>How do they conduct analyses to inform their business decisions?</i> 3. <i>What learnings can the Commission leverage to inform future program designs?</i> 	Stakeholder Feedback to Energy Division
2:40 pm (30 m)	Alignment with the Standard Practice Manual for Cost Effectiveness (Refer to Webinar & PPT) <ol style="list-style-type: none"> 1. <i>Should the requirements of the Standard Practice Manual shape our approach to measurement, evaluation, and program review?</i> 2. <i>If there are shortcomings, how could the Commission's analysis be modified to reflect the characteristics of PEV infrastructure programs?</i> 	Stakeholder Discussion
3:10 pm (10 m)	Break	
3:20 pm (30 m)	Significance of Metrics and Data Guidelines <ol style="list-style-type: none"> 1. <i>How do we use the information available from PEV infrastructure deployments to provide market certainty during program reporting, review, redesign, and further implementation?</i> 	Energy Division-led Stakeholder Discussion
3:50 pm (10 m)	Wrap-Up	Energy Division staff

Quantifying Benefits and Costs of PEV Infrastructure

The following table is an example (non-exhaustive) set of metrics that are associated with an individual site's installation.

Program Benefit or Cost	Measurement	Data Needed (unit)	Collection Strategy	Processing, Analysis, & Reporting	Comments/ Issues
<u>Benefits</u>					
Electric Miles	Workplace Charging	Electricity dispensed (kWh)	Meter data		
	Displaced Gasoline	Electricity dispensed to PHEVs	Recognize PEV type, survey		
	...				
PEV Adoption	Direct Purchases	PEVs of users	Survey of users		
	Indirect Purchases	PEVs of non-users in region	Pre- & Post-Monthly sales survey of dealers		
	...				
<u>Costs</u>					
Labor	Labor required to install	Hourly labor rate, hours of labor	IOU tracking of invoices		
Equipment	EVSE	EVSE	IOU invoices		
Equipment	Make Ready	Components by site type	IOU invoices		
Energy	Cost to Customer	Electricity dispensed (kWh)	Meter data by rate		